AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listing of claims in the above-identified application.

Listing of Claims:

1. (Currently Amended) A dual diversity receiver that includes first and second antennas to receive first and second radio signals provided in a wireless channel, wherein the first and second antennas produce first and second antenna signals that are representative of the received radio signals, the receiver comprising:

a first LNA that receives the first antenna signal and produces a first amplified signal;

a second LNA that receives the second antenna signal and produces a second amplified signal; and

selection logic to ~~continuously~~ perform monitoring of a signal characteristic of said first and said second amplified signals and a channel characteristic of the wireless channel, and select one of the first LNA and the second LNA ~~based upon said monitoring~~ so that its output is processed by the receiver; wherein said monitoring is performed so as to maintain both phase and amplitude of said output and wherein said selection is based at least in part upon said signal characteristics and said channel characteristic.

2. (Previously Presented) The receiver of claim 1, wherein the first and second LNAs further comprise first and second bias generator circuits that control the operation of their respective LNA based on a selection signal.

3. (Currently Amended) The receiver of claim 1, wherein said ~~selection logic is operative to switch between said first and said second LNA when the currently selected signal fades below a selected threshold~~ signal characteristic is a signal strength and said channel characteristic is a coherence time.

4. (Currently Amended) The receiver of claim ~~1~~ 3, wherein said selection logic is operative to switch between said first and said second LNA when the signal strength of the provided signal is less than a threshold value or when the elapsed time receiving the current signal exceeds the coherence time ~~coherence~~ of the wireless channel; wherein the threshold value is based on the signal strength of the previously selected amplified signal.

5. (Currently Amended) A method for operating a dual diversity receiver that includes two antennas to receive a radio signal, wherein each antenna produces an antenna signal that is representative of the radio signal, the method comprising the steps of:

inputting the antenna signal from each antenna to a corresponding LNA that produces an amplified signal;

providing one of the amplified signals to the receiver;

~~determining which amplified antenna signal has a greater signal characteristic; wherein said determining is performed so as to maintain both phase and amplitude of said amplified signals;~~

~~activating the LNA associated with the antenna signal having the greater characteristic, so that the amplified antenna signal from the activated LNA is processed by the receiver~~

~~determining a signal characteristic of the provided antenna signal;~~

determining the coherence time of the wireless channel;

determining the signal strength of the provided signal;

selecting one of the amplified signals to be provided to the receiver, said selecting based at least in part on the signal strength and the coherence time; and

repeating the steps of determining and selecting.

6. (Currently Amended) The method of claim 5, further comprising using a digital filter to measure said ~~signal characteristics~~ coherence time.

7. (Currently Amended) The method of claim 6 wherein said digital filter is an IIR filter ~~configured to perform a channel estimate~~.

8. (Previously Presented) The receiver of claim 1 wherein said selection logic comprises a switching apparatus integrated within said first and said second LNAs; wherein said switching apparatus is operative to switch said output from said first and said second LNAs.

9. (Cancelled)

10. (Currently Amended) A dual diversity receiver system for receiving signals in a wireless channel, comprising:

a receiver circuit;

a first antenna to receive a radio signal and produce a first antenna signal;

a second antenna spatially separated from said first antenna to receive said radio signal and produce a second antenna signal;

a first LNA to receive said first antenna signal and produce a first amplified signal;

a second LNA to receive said second antenna signal and produce a second amplified signal; and

selection logic to selectively provide one of the first amplified signal or the second amplified signal ~~one of the first LNA and second LNA~~ to the receiver circuit, said selection based at least in part upon ~~comparison of a first measured value of a signal characteristic of said first amplified signal and a second measured value of said signal characteristic of said second amplified signal; wherein said signal characteristic of said first and said second amplified signals is measured so as to maintain both phase and amplitude of said amplified signal~~ a signal characteristic of the first amplified signal and the second amplified signal, and a channel characteristic of the wireless channel.

11. (Previously Presented) The receiver of claim 10 wherein said signal characteristic is a signal strength.

12. (Currently Amended) ~~The receiver of claim 11 wherein said selection logic is operative to switch between said first and said second LNA when said signal power level falls below a selected threshold~~ The receiver of claim 11 wherein the channel characteristic is a coherence time.

13. (Currently Amended) The receiver of claim ~~10~~ 12 wherein said selection logic is operative to switch between said first and said second LNA when the signal strength of the currently selected signal falls below a threshold value or the elapsed time receiving the current signal exceeds the coherence time ~~coherence~~ of the wireless channel; wherein the threshold value is based on the signal strength of the previously selected amplified signal.

14. (Previously Presented) The receiver of claim 10 wherein said selection logic comprises a switching apparatus integrated within said first and said second LNAs.

15. (Cancelled)

16. (Currently Amended) The receiver of claim ~~10~~ 13, further comprising using a digital filter to measure said ~~signal characteristic~~ coherence time.

17. (Currently Amended) The receiver of claim 16 wherein said digital filter is an IIR filter ~~configured to perform a channel estimate~~.

18. (New) The method of claim 5 wherein said selecting comprises switching the provided amplified signal when the signal strength of the provided signal is less than a threshold value or when the elapsed time receiving the signal is greater than the coherence time of the wireless channel; wherein the threshold value is based on the signal strength of the previously provided amplified signal.